

WHAT IS CLAIMED IS:

1. A method of performing a remote copying between two storage systems used as external memories of a CPU which issues a request for access to a logical volume, wherein in one of the two storage systems serving as a copy source, the designation of a partial area of a logical volume on the copy source storage system is accepted and data of the designation accepted partial area of the logical volume is transferred to a logical volume on the other of the two storage systems as a copy destination without the intervention of said CPU, whereas in the copy destination storage system, the data of the partial area transferred from the copy source storage system is written into the logical volume on the copy destination storage system.

2. A method of performing a migratory copying with which data migrates between two storage systems used as external memories of a CPU which issues a request for access to a logical volume, wherein in one of the two storage systems serving as a copy destination, the designation of a partial area of a logical volume on the other of the two storage systems serving as a copy source is accepted, data of the designation accepted partial area of the logical volume on the copy source storage system is read from the logical volume on the copy source storage system without the intervention of said CPU, and the read data is written into a logical volume on the copy destination storage system.

3. A storage system used as an external memory of a CPU which issues a request for access to a logical volume, wherein

the storage system comprises a plurality of storage devices and a controller for mapping said logical volume on an address space formed by said plurality of storage devices and making access to the logical volume mapped address space in accordance with the request for access to said logical volume issued by said CPU, and

said controller includes managing means for managing a partial area of said logical volume designated from a user, and means for copying data of the managed partial area of said logical volume into a logical volume on another storage system without the intervention of said CPU.

4. A storage system used as an external memory of a CPU which issues a request for access to a logical volume, wherein

the storage system comprises a plurality of storage devices and a controller for mapping said logical volume on an address space formed by said plurality of storage devices and making access to the logical volume mapped address space in accordance with the request for access to said logical volume issued by said CPU, and

said controller includes managing means for managing a partial area of a logical volume on another storage system designated from a user, and means for copying data of the managed partial area of the logical

volume on said other storage system into a logical volume on the self-side storage system from said other storage system without the intervention of said CPU.

5. An information system provided with a plurality of storage systems used as external memories of a CPU which issues a request for access to a logical volume, wherein

each of said plurality of storage systems comprises a plurality of storage devices and a controller for mapping said logical volume on an address space formed by said plurality of storage devices and making access to the logical volume mapped address space in accordance with the request for access to said logical volume issued by said CPU,

the controller of a first storage system in said plurality of storage systems includes managing means for managing a partial area of a logical volume on said first storage system designated from a user, and means for copying data of the managed partial area of the logical volume on said first storage system into a logical volume on a second storage system in said plurality of storage systems without the intervention of said CPU, and

the controller of said second storage system maps an address space of said storage devices corresponding to the capacity of said partial area onto the logical volume on said second storage system into which data of said partial area is to be copied.

6. A storage system according to Claim 3, wherein said controller maps an address space of said storage

devices corresponding to the capacity of said partial area onto the logical volume on said other storage system into which the data of said partial area is to be copied.

7. A storage system according to Claim 3 or 4, wherein said managing means of said controller manages said partial area in units of an area having a fixed length.

8. A storage system having a function with which a copy volume as a copy of data stored in an original volume at a certain point of time is generated in accordance with an instruction from a host, the storage system comprising means for receiving a start address and an end address from said host, said start address and said end address indicating a range included in said original volume, and means for performing the reading from said original volume and the writing into said copy volume for data of a range specified by the received start address and the received start address so that data of a range of said copy volume specified by said start address and said end address is made coincident with data of said original volume again.

9. A storage system according to Claim 8, comprising means for storing a location at which there is a difference between said original volume and said copy volume generated in the write processing by said host, and means for reading, when data of a range of said copy volume specified by said start address and said end address is to be made coincident with data of said original volume again, only the stored difference location from said original volume and writing it into said copy volume.

10.       A storage system connected to a host, comprising means for receiving from said host a start address and an end address which indicate a specified range belonging to a volume, and means for generating a copy of data included in said specified range.